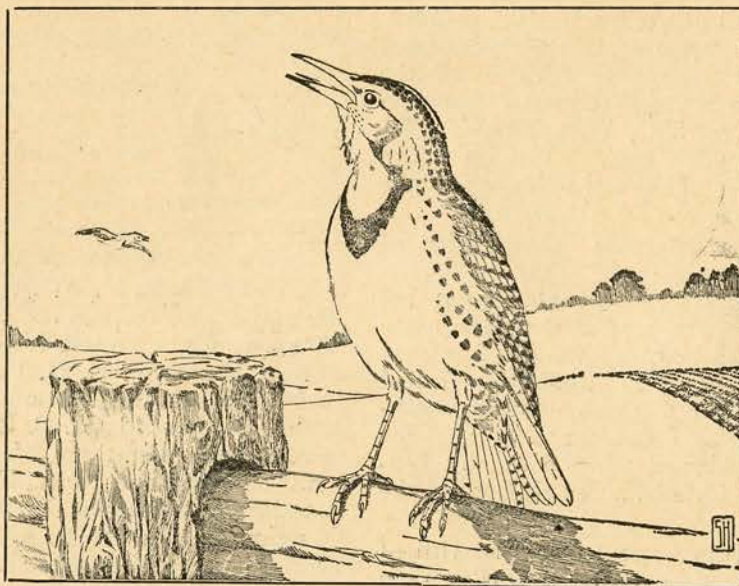


NORTH AND SOUTH DAKOTA HORTICULTURE

February, 1943



The Meadow Lark, perhaps our most valuable bird, that does not subsist on the crops planted by mankind, but instead, protects them by destroying injurious insects and adds much to the joy of life by its cheerful little songs, in early spring.

1848
8378



THE BALD EAGLE

By
O. A. Stevens



O. A. Stevens

This bird was selected as our national emblem by Congress on June 20, 1782. Many have criticized the selection on account of the fact that the bird feeds largely on dead fish. They seem to have overlooked the fact that for that very reason it might be regarded as the original American conservationist. The golden eagle as a "nobler" bird, has had its advocates; but that would be placing a premium upon a bird recognized as chiefly destructive in its food habits. The golden eagle is also a European bird. North America is, in fact, rather poorly provided with eagles, and the bald eagle is our only exclusively native species. The gray sea eagle of Europe has been recorded in Greenland, and Steller's eagle of Asia in the Aleutians. Europe has six, and in the entire world there are some fifty species.

One critic of our selection admits with respect to the bald eagle that, "Its soaring flight, with its pure-white head and tail glistening in the sun-light, is really inspiring". Apparently the white head was considered one of the strong features of the bird. This character is not acquired until about the third year, so the younger birds are not easily distinguished from the golden eagle. The immature golden eagle has the base of the tail white, and there is a whitish patch toward the tip of the wing.

Audubon described an eagle as the bird of Washington, *Aquila washingtonii*. This has usually been regarded as just a young bald eagle; but quite a few authors have contended that this name should be retained for the larger northern form, restricting the southern form to southern United States. Bent quotes wing measurements of southern birds as 21 to 22 inches compared to 23 to 25 for northern birds. The original name given by Linnaeus was based upon Catesby's description of the southern bird.

The bald eagle occurs over all of the United States and most of Canada except the northeastern part. They are obliged to leave the colder parts during winter since they depend much upon open water for food. Except for these birds there may not be much migration. They are said to be probably more abundant in Florida than anywhere else in the United States, most commonly nesting in tall pine trees 50 to 100 feet above the ground but sometimes as low as 20 feet. Mr. Bent states that he saw two nests in trees on golf courses, others near houses or roads; but in general the birds have become rare

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in the older and more densely populated parts of the country. Audubon saw eagles along the Missouri River in the Dakotas in 1843, but they evidently were not numerous. At Fort Union one of the hunters brought him a young bird.

Some of the most intensive studies of the bald eagle were made by the late Professor F. H. Herrick

The Bald Eagle
(Continued on Page 24)



NEWSLANTS

By
Harry A. Graves



H. A. Graves

This month's column is going to be devoted to Victory Gardens for 1943. I had plenty of other material at hand on various other topics but recent developments indicate that good gardens this coming year are going to be even more necessary than they were in 1942. The food rationing program will make it easier to convince people they had better garden and garden adequately.

We have some problems to face. Take tomatoes for example. Two or three or maybe more different diseases took a toll of our tomato crop last year. What can we do about it this year? The pathologists recommend seed from healthy vines, seed treatment and rotation of the tomato planting as controls. Spraying with Bordeaux mixture gave beneficial results here at the North Dakota Agricultural College Experiment Station. We are now told that such copper dusts and sprays may be scarce this coming year which further complicates things. In our own garden we plan to set our tomato plants 5 x 5 feet. This will permit free movement of air through the planting. It seemed to me last summer that isolated plants dried off more rapidly after dews and rains. If they did, and it seems logical that they should with wider spacing, then diseases that need a moist surface in order to thrive should be less destructive.

Reports coming in from Victory Garden committees indicate that many gardeners are alarmed about the amount of time they will have available for gardening with the shortage of labor anticipated. For these people a garden containing fewer crops is suggested. Tomatoes, corn, string beans, carrots, beets, potatoes and one or more green leafy vegetables will give a maximum of time. They also are less subject to insect troubles than some of our crops. Cucumbers are low in food value and take up considerable space. Winter squash is high in Vitamin A and should be grown if any vines are to be included. Of course, for those who think they have the time the complete garden is still recommended.

There have been reports of idle pressure cookers. These cookers should be dug out early in the season. Some of them need minor repairs and spring or early summer is a good time to get these cookers in shape. Cookers should be shared wherever possible.

Quite a few people still buy all, or part, of their winter supply of potatoes. Many other folks grow their own but are using very inferior seed. Both of these conditions should be corrected. County Extension Agents can help locate a few bushels of good certified seed. This seed will make all the difference in the world in both the quantity and quality of potatoes taken from your patch next fall.

Storage of vegetable crops such as carrots, beets, and parsnips is a problem. Most basements are not suited for such storage. Basements with pipe or pipeless furnaces are almost always too warm for storage of these crops. The best solution for a good root storage cellar is to dig small pit outside the basement proper. A door can then be cut through the basement wall into this storage room.

Seedsmen tell us that there will again be enough seed if it is handled carefully. Try to grow enough but don't bite off a large garden and then not be able to care for it.

Again don't forget to concentrate on the major crops for home canning; namely, corn, tomatoes, and string beans. Peas are good, too, but are tedious to pick and shell. For all the non-acid crops a pressure cooker is a much safer bet and saves time and fuel. Try to buy, beg, steal or borrow one somewhere.

If you would like a leaflet recommending varieties and planting information see any North Dakota County Agent or write the Information Department, N.D.A.C. for Special Circular No. 1 (Revised) "1943 Victory Garden."

If any member of the North Dakota Horticultural Society in good standing *did not* receive his or her premium for 1942, will you please notify the Secretary, Harry Graves, N.D.A.C., Fargo, at once.

Garden Club Gleanings

(Continued from Page 20)

the club does not serve lunch at their meetings they ask for a number of recipes for rollcall which should make them so hungry it seems as though they would have to abandon the meeting.

Perhaps others of you were as interested as I in the "Flower of the Month Guild" mentioned by Grace Houck in last month's gleanings. In answer to my query, Mrs. Houck gave their address as Indianapolis, Indiana, and says they received twelve unusual plants and a Haeger Pottery vase each for the amount of \$10.00. It sounds interesting to me, and maybe some of the clubs will want to try it.

George Washington's fixed agreement with his tenant farmers called for certain acres to be "planted to apple trees, and kept fenced and in good tilth".—ILGENFRITZ ORCHARDIST.

MANITOBA NEWS LETTER

By
W. R. Leslie



W. R. Leslie

In planting fruit trees, bushes and plants, the question where, arises several times. After the site inside the shelterbelt is chosen, there remains the question of where each type of fruit is to be accommodated. Then there is the problem of where each individual tree or plant is to be located. This last consideration is often referred to as spacing.

In most prairie farm orchards, or fruit gardens, the materials are usually set too close to each other.

A young nursery tree is an infant. It will require more and more space as it grows through youth and up to mature form. It may take ten, fifteen, or more years to reach its maximum stature. A consideration favouring wide spacing is the fact that shortage of soil moisture is one of the chief limiting factors in prairie fruit culture. Crowded trees aggravate the situation as the roots of neighboring trees compete for the life-depending soil moisture.

Apples, crab apples, black walnuts and butternuts may be placed 20 by 20 feet, or 24 by 24 feet, pears 20 by 16, plums, apricots, Morello cherries and black cherries 20 by 15 feet, mulberries, elderberries, Nanking cherries, Bush cherries, buffaloberries, saskatoons and pembinas 16 by 12, currants and gooseberries in rows 6 to 8 feet apart with 5 to 3 feet spacing in the rows, raspberries 8 by 3, strawberries 4 by 1 1-2 feet, and grapes 10 feet by 6 feet.

Fruit trees are not long lived comparatively in this low-precipitation area with its widely fluctuating temperatures.

The expectation period of usefulness of a hardy apple tree is from 20 to 30 years. If the trees possessed a durability twice as long, they should be allowed spacing of from 30 to 40 feet. However, as most fruits on the prairies are relatively short-lived, spacing is arranged so that the sprayer wagon may move down between the rows conveniently, and so that a generous area of soil be provided as the feeding range of the roots of each subject.

Sand cherry hybrids may be used as temporary interplants between apple trees. A row or two of raspberry, currant, gooseberry or strawberry plant may be growing between the rows of tree fruits while the orchard is young. Grapes are placed in a warm, sheltered sunny exposure, and supported on two or more rows of stout wires.

A year ago notes were supplied on eight seedling selections of sand cherry and sand cherry hybrids. They were Morden numbers 115, 116, 117, 118, 119, 120, 121, and 122. An additional number, Morden 123, is described here.

Morden 116 has been named DURA. This open-pollinated seedling of that favorite sand cherry hybrid, Sapa, bore its first fruit in 1936. It was given the place name P-4a-18. In 1941 it was accorded a retest number, Morden 116. The gratifying general behaviour of the variety warranted its naming. It is called Dura, owing to the remarkable durability of its fruit. It remains in good edible condition on the bush for over a month, or from the third week of August until early October. The bush is low, spreading and in form suggestive of a large-growing Tom Thumb. This tendency to more or less prostrate habit indicates the variety may give fullest satisfaction when top-grafted on plum stock a few feet from the ground rather than when budded low on plum or sand cherry seedlings. It takes well on plum. It is hardier in constitution than Sapa. The fruit is somewhat larger. The appearance is not striking, being dull green blotched with purple. The lack of bright colour may explain its freedom from bird damage when other brighter sand cherry hybrids are considerably punctured by the beaks of birds. The flesh is red-purple but less intense purple than Sapa, meaty, smooth, tender, sweet, and of pleasing flavour both as dessert and canned.

Morden 123 is a Sapa seedling given a retest number this season. It bore first in 1941 and was known by its place number U-14-100. This is a sister of Dura. The productive bush is strong, spreading and tree-like. It appears considerably more vigorous and more winter hardy than Sapa. The fruit has been larger, being 1 1-2 inches through roundish with flattened ends. Skin is red-purple, somewhat thicker than Sapa. Flesh is dark red-purple, partially free-stone, firm, meaty, sweet, and of first quality as dessert and for canning. Fruits remain in good condition on the bush from late August to about mid-September.

It is fortunate that these two daughters of Sapa carry fine fruit qualities while they apparently possess bush characters that make them more dependable for the northern prairies than is their cherished mother parent.

See by the papers that the National Park service uses a waterproof coating to protect old ruins. They picked up the formula at a beauty shoppe. —Foxtail Johnson in THE PRAIRIE FARMER.



GARDEN NOTES

By

W. E. H. Porter



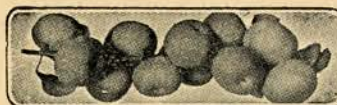
W. E. H. Porter

As we enter winter's second and more intense lap, it is pleasant to enjoy longer days with increased sunshine and a modified returning warmth from Sol's rays. The ones notes of pre-Christmas days appear as from some far off time. Nov. 21st. Winter's early arrival, in late October, with its terrifying possibilities has not materialized. Altho the freeze up holds, what little rabbit snow there was has all evaporated under influence of high but chilling winds, absence of snow being desirable for the gardener but quite otherwise for the garden which is very drab and dusty even the perennial winter evergreens have that wilted appearance characteristic of a hot, dry late summer. The Hansen Siberian rose bush being the one bright feature with its spangles of ruby red hips, subtended by enough foliage to redeem any aspect of barrenness, which fortunately the English sparrows, about the only resident bird remaining, do not regard as a food item. Who can afford to be without this pretty winter shrub, it imparts such a Christmassy touch to the garden and presumably can still be obtained from Carl Hansen of Brookings who, I believe introduced it from Siberia. My duck pond which harbored all kinds of water fowl during the summer, perhaps coots were the most numerous, there seemed to be hundreds, dried up in mid-autumn and now provides ideal range for the poultry which spend all day busily scratching among the dried brown grasses and rushes tho I have not the least idea what they are getting out of it. Listened in on an organ recital from All Saint's school at Winnipeg; It was by the composer Hugh Bancroft and included Handel's Largo in G. rich, full triumphant harmony yet with a strain of infinite pathos; what could be more sublime? Which reminds one of a statement from Holy Writ "that a prophet is not without honor only in his own country" for it was not until he left Germany for residence in England that he was recognized as one of and assured a place with the immortals. Nov. 27th. Still sunny; 6 below zero at 8:50 a. m. Noted a Hairy woodpecker hammering away on a boxelder bough; breakfast doubtless consisting of boxelder bugs. Numbers of these birds have drifted in here during the last four years with a corresponding decrease of that objectionable insect

that used to swarm everywhere, even indoors. This cold wave rolled in from the arctic two days ago on the heels of a weeping fog and on Dec. 2nd., continues with gray skies, dry snowless winds and sub-zero temperatures. Like a thirsty pilgrim finding an oasis, the indoor herbarium affords a peace of mind that cannot be shaken, as expressed by the Chinese proverb "If you only have the price of a loaf of bread, buy half a loaf and with the balance, a flower to feed the soul" a standard we have always maintained in the home. In one of her last letters before her death in 1941, our life long friend and also life member of our Horticultural Society Mrs. Smith, of England wrote, "Always have, or try to have a flowering plant on the table", which reminds me of a pink geranium we bot in Winnipeg at the time of our marriage in 1898 and, altho the potatoes invariably froze in the cellar, this plant lasted for years. My wife made a heavy nightcap, something like a tea cosy, set over a wire frame and never did it freeze, but bloomed the year round; every fall we would save a cutting, discarding the old plant. This year for my winter collection I intended to carry over 5 or 6 plants and find, on count 32. It is a coincidence that some are well described in current issues of Mass. Horticulture and as usual came from that rendezvous of unusual plants Rex Pearce' collection. Four are succulents taking up little space with thick, waxy, shining foliage, whose attractiveness cannot be over-estimated at this dull season,, when flowers are so hard to coax. Bessie R. Buxton of Peabody, Mass., tells us about them all. Echeveria elegans is a sempervivum (hen and chix) type, with dense, spreading semi-translucent veronese green rosette. Graptapetulum from Paraguay, much same ground color with a charming overtone of amethyst. The South African Aloe brevifolia, with thick steel blue, thorn margined leaves and from Madagascar, Kalanchoe Blossfeldiana, thick green leaves, a first cousin of the well known air plant. All these have flowered for the writer, as mine probably will, with lengthening days, provided winter savagery can be held at bay. Another bizarre, neat midget from South Africa is Haworthia margaritifera, of the lily family, in appearance something between a Yucca and an Aloe, pointed dark green bayonet-shaped leaves, studded with white tubercles, like pearls; the root of this plant is a mere tuft of brown. These five plants are just like those artificial wax plants that Victorians used to have in their best room, under a glass bell. What home is without one begonia? and nine cases out of ten, that one will be a variety or hybrid of semperflorens. I doubt if any plant has been experimented with more than this Brazilian

Garden Notes

(Continued on Page 21)



BUFFALO GRASS

By
H. R. Woodward



H. R. Woodward

In 1935 the Hot Springs Board of Education constructed a new athletic field as a WPA Project. One of the problems encountered was that of establishing and maintaining a grass football field which would be tough enough to stand hard usage, and enduring under conditions of high summer temperatures and light rainfall and where cost of watering could be kept at a minimum. Whereupon the board turned to buffalo grass, *bulbilous dactyloides*, after the ground was leveled and put in shape for capping with a smooth turf. Its value for pastures in this area had long been recognized, since it is adapted to a rainfall of from 12 to 25 inches and will endure hot summers and cold winters. While there has been some buffalo grass seed on the market it was hard to get and very expensive, since the seeds are produced so close to the ground it makes it difficult to harvest.

A pure stand of buffalo grass was found south of town a few miles and a sod-cutter was obtained. It was soon found however that the sod-cutter could not be used advantageously and an ordinary breaking plow was used cutting pieces of sod in even stripes about 12 inches wide and about 5 inches thick. This was hauled in and laid just as it was cut from the ground and the entire field was solidly covered from one end to the other. This was done early in the spring when the sod was quite moist, but unfavorable weather followed during the late sprang and some sprinklers were placed on the field during the summer to keep the layer from drying out.

The first year the field was not rolled and the following fall found it quite rough yet the pieces of sod had become well knit together. Later a heavy roller was placed on it and all the bumps and ridges ironed out. As a result the field was in top shape the following year.

Buffalo grass has proved to be a good type for this project. It has proved to have been better when placed solidly together than if intervening spaces had been left, because the dry winters following and the strong winds would have blown out the dirt between and left ridges on the field. The strain has proved to be of fine leaf and one which remains green longer than some found growing under natural conditions.

Buffalo grass is short, commonly 4-6 inches tall, sometimes taller. It is dioecious, that is it has the spikelets of staminate flowers on one plant and the pistillate flowers hidden in the leaves on another, or we have found some plants to be monocious when both are found on the same plant. Both types stolonize or send out runners or shoes, sometimes in a good year as far as 18 inches. The internodes are from 2 to 3 inches long and the nodes send out blades of grass and roots which form a sort of new plants. Each plant propagates vegetatively its own kind, rarely will it propagate both the staminate and pistillate plants.

We have found that it requires less care than many other types of lawn grasses, yet it does not do so well on sandy soil, nor in the shade. It has now spread to the ends of the athletic field not previously sodded and to the sides to the cinder track. It stops at the cinders however because they do not contain enough clay for the roots to firmly establish themselves. One thing is noticeable, however, and that is it is late in getting started in the spring. When all other lawns in town chiefly Kentucky bluegrass, are green quite early, the athletic field produces a rather drab appearance and many people think it has killed out. Along about the middle of June it begins to take on a satisfactory appearance and the entire field becomes a solid mat. Cutting to a height of about 3 inches above the ground aids in keeping down competitive grasses and weeds and gives the plant plenty of necessary sunlight. Too frequent and too close cutting however will weaken the grass.

Beebe's Philosophy Continued from Page 19

3-4 absolutely prairie and that is where the shrubs have to grow.

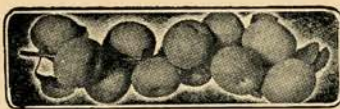
In Western New York, Franklinville, is the town, lived a girl named Carrie, quite a few years ago, and when the name Carrie Benson appeared as author of "Refugee" I thought of her and some other very fine "Carries". This is dedicated to all of them that are readers now, and with the hope that they too will find spots of beauty out doors this month.

Just at the edge of the garden walk,

In the still cold morning I found a place
Where stiffened strands of the frozen grass
Were plaited in a silver lace.

At first glance the view may seem bleak and uninteresting, from your window but if you go out oftener looking for beauty you will find it now, and know where to find it next time.

In each Garden Club Program, should be, "Loveliness this Month in Our Own Prairie Town."



BEEBE'S PHILOSOPHY

By
H. E. Beebe

FEBRUARY FOLIAGE

FOLDS FLOWERS



H. E. Beebe

Don Quixote, will find a resemblance.

Coming back to the text the flakes are fair for protecting perennial plants, but due to the movement of the air in the Dakotas, and the changes in the brilliance of the suns rays, the snow is likely to be absent, in various places, and the best plan is right now to go out in the fields and byways, and extract a shock of corn fodder, or sudan grass, from some kind hearted farmer, if any I would say quite a few.

Fodder has been and still is very cheap in the Dakotas, and I recommend paying nothing for it, but offering some of your extra plants, when transplanting in the spring. The wind will not blow this heavy stuff away and the sun cannot get through it. To the best of my knowledge there is more injury on account of freezing after Feb. 10th, in the Dakotas, that there is before. The general idea, is the freezing and thawing and freezing that does the dirty work. Do it now, I mean, get the fodder.

DELIGHTFUL DAKOTAS

Bro. Pankow publicity expert for our State, sends the new booklet "South Dakota Agreeable and Bountiful Living," put out by the Highway Commission and the Department of Agriculture, jointly. In passing may I praise our new Governor, M. Q. Sharpe, in appointing one person to two positions, eliminating salary from the backs of the tax payers. Putting out this booklet jointly instead of two separate booklets is right along that line. A lovely park picture is on the second page from the last, and a fine home opposite.

The only thing I would add to the title is, "And Optimistic and Durable People."

Last week I sent to our Secretary Mr. Simmons, some copies of, "Garden Flowers for South Dakota," which he would probably send to any one interested in the definite ideas of our State College, for a dime, just the same as the charge for handling the books

in our library. It is really very good.

The January issue of this family magazine, was most interesting. For the benefit of Jillful Juanita, the question of the Christmas tree and Santa Claus, in the Baptist Church at Ipswich, was compromised by closing the regular Christmas program, with benediction by our good Minister, after which Santa Claus appeared, right in the main church auditorium. It seems to have survived successfully. The tree already was there, and was kept up for a couple of Sundays afterwards. This was the decision of the majority, and seemed to work out very well.

As to Harry Graves, wonderment, as to whether I hunt or not, he is correct, which ever it is, but really the interest is more in live birds and dead fossils, and scenery and trees and flowers, than in bringing home game. My brother M. Plin was a good hunter, and knew what the birds were going to do, and was there waiting.

On page ten the expert bird man of the Dakotas, O. A. Stevens, says, that I am reminding him to put something about bird banding. Most certainly and further, it should be about birds that readers have a chance to see. There are many interesting things, about the common birds, in the Dakotas, and the experiences of people of the Dakotas with them. There should be more time for that. Often we are too busy to live we spread out too thin on too many things.

Right now there is not much digging in the soil, but I happened to think about the railroad foreman, who sent a note to the Supt. "I am inclosing the report of the accident, when Mulvaney struck his foot with his pick. Under the heading, Remarks: do you want mine, or Mulvaney's?"

President Jackson, of our State College writes, "We have begun the work of establishing the N. E. Hansen foundation orchard. Land is being cleared in preparation, and Director Johnson of the Experiment Station showed me a complete map of the acreage indicating the plantings to be made. We hope to speed this project along as rapidly as possible."

This is sure good news, both from the standpoint of honoring our good Dr. Hansen, and also calling the attention to others, perhaps amateurs, to the possibility of evolving new varieties in the Dakotas. In our January number is Grave's account of a lady finding a double blood root and Woodward's telling of John Robertson and him locating the Mountain Mahogany which might be used farther from the Black Hills. If Barr of Smithwick finds that it grows with his dry land prairie flowers, I will take a chance farther away. The Dakotas are

See Beebe's Philosophy

(Continued on Page 18)

GARDEN CLUB GLEANINGS

By

Juanita E. Jorgensen



J. E. Jorgensen

The magic of the words Garden Club seems to be an open sesame to the door of friendship, for to belong to any garden group automatically invites the entrance of horticulturally minded people into your life, where they quickly and firmly become entrenched in your heart. I know of no other hobby which ties people together in the bonds of friendship so rapidly and securely, and do not know just how to explain it. I have had it happen to me; and I have seen it happen to others. Two people who merely nodded to each other for years, let down all barriers and became dear friends as soon as they found a common footing in the garden club. It is a sure basis for that satisfying companionship which comes through letters, too. This deep intimacy which gardeners feel for each other is expressed in the last lines of a poem which appeared in a federated garden club booklet from the state of Washington a number of years ago, and which struck such a responsive cord in me that I would like to have all of you share it with me. It was written by May McLeod Pitt of the Darlington Garden Club, and is used in the Dell Rapids year book this year.

THE GARDEN CLUB

The Garden Club's the place you go
To tell about the things you grow.
And what is shrub, and which is weed
And when to plant each bulb and seed;
Why the iris needs a drink,
Should we mulch or prune the pink;
When should we hoe the tulip bed,
And rake the leaves, now brown and dead.
But of all the things we ever do
This is a secret I'll tell to you;
Though leaves may die, the flowers may fade,
The friends that the Garden Club has made
Will be with us to the shining end
For the gardener is a faithful friend.
Too, these people who garden seem to have an

innate fineness of character. It is not always apparent to all comers; but from contact with the good earth they seem to draw to themselves an inner realization of beauty, of understanding and of tolerance which flows through their bodies and is communicated only to those who touch the right

spring. They see beauty in the most common things. Who but a gardener would look at two great rankly grown weeds on a hot August day, and leave them, because she visualized their transformation into fairy forests by next winter's cold? Here is what Mrs. Georgia Elliott of the Lewis (Iowa) Garden Club has to say: "After our Christmas snow there were a number of frosty morns when everything outside was lovely. Last fall I thought several times I'd pull up two bushy weeds near a big boulder on which the cement bird bath sits, but left them because I knew they would be beautiful when heavy frosts came. How glad I am I left them!"

Several topics in the program of the Lewis Garden Club interested me. Instead of having a program on Rhubarb or the Silver Lace Vine, the lesson was the Smartweed Family, of which these dissimilar plants are both members, as well as Prince's Plume, Buckwheat, Curled Dock, Field Sorrel and others. The Mint Family made another lesson, and that amazing Nightshade Family has enough members to make it the basis for a twelve month study. Most everyone knows that the potato and the tomato are sisters under the skin; but did you know that the striped salpiglossis, the Chinese Lantern, Jerusalem cherry, Petunia, butterfly flower, Angel's Trumpet and Browallie are also nightshades? (I wonder how many more Prof. L. C. Snyder could add to this family?) Then there is that vast group known as the Composite family which includes such well-knowns as the dahlia, cosmos, coreopsis, thistle, corn-flower, chrysanthemum, goldenrod, and all the asters, and daisies, and sunflowers with their characteristic ray flowers. Helen Field Fischer's book, the Flower Family Album presents these flower families as a sketch book of plants with little stories of their personalities to make it one of the most entertaining horticulture books I know, and it is no doubt this which the Lewis Club uses as a reference.

There are one or two other programs at which I should have liked to listen in with Mrs. Elliott down there in Lewis—Plant Oddities in February, Fruits of God's Lands in March, and a June lesson of Lincoln Among the Trees. Roll calls for this club are different too, and call for jokes in July. Now what better than a good hearty laugh in July when often we feel like crying at some untoward happenstance in our gardens. The program on the Nightshade Family includes a rollover for recipes using members of the nightshade family. Wouldn't that be nice to use in connection with all the Victory Vegetables we'll be growing this summer. Though

See Garden Notes

(Continued on Page 15)



FRUIT & VEGETABLE NOTES

By
F. X. Wallner



F. X. Wallner

From a few fancy plants of Kochia, Burning Bush or Mexican Fire Bush, at the St. Louis Fair, many years ago, we have spread a bad weed thruout the states. I am glad to see others appealing to the seed firms to discontinue listing it, but it is too late now. I wonder does Mr. Graves know that a Nursery Co. not far east of Fargo, in Minnesota, a year or so ago was still listing creeping jenny and praising it as a good rock garden plant. Michigan fruit growers claim the starlings will eat them out of farm and home. They claim they have eaten one fourth to one third of the sweet and sour cherries, also raspberries and no doubt will have increased very much by 1943. Growers of vegetables and potatoes from different states, at the Iowa meeting were unanimous that we cannot increase our acreage this year, in fact most all said they would decrease it. The confusion in selling regulations, the sure loss for over production, with no labor and no supporting price, is only another hazard against a living price for perishable crops. Late blight, which hit most producing states, was the most discussed topic of the two day meeting. It was brot out that the stage is set for the loss of our potato crop in 1943; should the weather be near what it was in 1942. They say Germany lost the other war because she lost her potato crop in 1918. It was brot out that nothing would pep up the growers, also the soldiers and sailors, who go at full speed 60, 70 or 80 hours per week, than to have Labor go a little faster and at least 54 or 60 hours a week. Son Paul, writing from Australia, admits it made him homesick to get the pictures of Bob's children and the tractors. Said he was working for the day he could come back to put in a crop with that four row seeder instead of the little tractor that pulled three seeders but it was a man-killer to handle it and to turn it at the end of the rows, while I thot it was easy compared to the one row seeder, pushed by hand as I have the old one that has probably travelled around the world, since I have used it in 14 inch rows on my 40 acres, for about 30 years. My other warrior son, James, writing from Jefferson Barracks, Mo., says that if they keep moving at the present rate in Africa, betting places are putting even money on the war being over in June. Mrs. Keating, of the Clark Garden

club, wants me to spread it far and wide that onion poultices and syrups are the very best remedies for colds. While trimming big elm trees, something happened, I don't think I fell off the ladder, but I could not remember Bob taking me home for dinner or eating dinner or the trip to the Doctor's office or back home a few hours later. While sitting on the lounge I asked what happened. Perhaps it was a warning to slow up as the engine is not what it used to be. For New Years, comes a callendar from Margaret Palmer, of Ballarat, Australia, with three odd looking birds, the Australia Kookaburras; Mr. Stevens of North Dakota can tell us more about them.

Garden Notes

(Continued from Page 17)

species. Bailey even lists the calla begonia as one of its varieties. Most of this family reward us with continuous bloom under conditions that with other plants would give none, but in the Dakotas, opportunity for experiment is very limited as no family seems more susceptible to frost, but for indoor decoration and perhaps for 2 1-2 months, in a sheltered garden spot, we can enjoy these gifts of the Gods. Have just received a copy of **THE BEGONIA**, (monthly publication of American Begonia Society) published at Long Beach, California. I note in an Adv't. one nurseryman offers over 400 species and varieties. I have modestly invested in 3 new species obtained from Leslie Woodrift, of Harbor, Ore. who does considerable collecting and hybridizing. One of his specials is a new hybrid Socotrana X Rex, with fragrant double flowers and handsome spotted leaves. My investment is six pointed leaflets of (woodbine) Carolinifolia, which rise palm-like from a thickened basal stem, on emergence they are clothed with heavy silken auburn hairs which persist to some extent after expansion, forming a web between leaflets. Another is the hollyhock (Maritana type) fragrant pink and forming bulblets in interstices and 3rd. is dwarf, rare Alto de Serra, olive green red backed foliage covered with short dense silver fur. Dec. 17th. The old farm house seemed quite warm this morning for during the night 6 inches of snow had fallen, sealing basal air leaks. Dec. 18th. Cleared from northwest and slowly the sparkling frost line creeps up door and crusts nail heads-an intense cold only to be avoided by almost sitting on the stove.

Barnacle Bill says: "An epitaph is a statement that usually lies above about the one who lies beneath.

—U.S.S. Whitney Tender Topics



SECRETARY'S CORNER

By

W. A. Simmons



W. A. Simmons

With the long evenings of winter, horticulturists should have the maximum time for reading and Mrs. R. J. Duncomb, of Laverne, Minn., thinks our readers are not making the most of their opportunities for reading the best of the new books, contained in our library. In a recent letter she says: "You should push your library more in your paper. I see there was only \$1 for book fees in your last report and, knowing how many I had out last year, I think I was responsible for most of it. When you think of what a marvelous opportunity one has for getting new, up to date material from your horticultural library for as little as 10 cents and return postage, I can't for the life of me see why more do not avail themselves of the opportunity of doing so. These books take us places where we can't afford to go, we have the opportunity of seeing new plants thru the eyes of an experienced gardener and often such a book is like a new window in a blank wall, thru which we see new vistas." We would be glad to have the North Dakota members take advantage of the riches of our library, as well as the Garden club members, and our own members. You will find the list of our books in the two last annual reports and if you haven't these, drop us a card and we will be glad to send them to you. A letter just received from Dr. A. S. Hoyt, Acting Chief of Bureau of Entomology and Plant Quarantine, U. S. Dept. of Agriculture, states that the sometimes veracious author of the article on Gooseberries in our annual report for 1942, did not have his facts on straight. This was the result of having the rules changed between the time of the writing and the publication of the article. Dr. Hoyt enclosed the revised quarantine rules and writes: "You will note, in the summary on page 3, that South Dakota, also North Dakota, are two of several states into which currants and gooseberry plants may be moved from any state or district without Federal restriction." This is welcome news as it allows growers to import new varieties that may not be handled by our own nurserymen, tho of course, like all other nursery items, the nearer home they can be obtained, the greater will be the survival. Taking it for granted that the freedom of the press exempts an editor from the commandment "Thou shalt not steal," the

following article is lifted bodily from Bro. Rahmlow's splendid WISCONSIN HORTICULTURE:

Apple syrup is a new product just developed by the U. S. D. A. Eastern Research Laboratory. It promises to take a portion of the 4,000,000 bushels of off-grade apples annually found in the United States.

The syrup is at present being tested by tobacco companies to replace glycerine to hold tobacco together and keep it moist, in the manufacture of cigarettes. Normally tobacco companies use 30,000,000 pounds of glycerine annually. The syrup can also be used in place of sugar in tea and coffee and in making pies and cakes. One bushel of apples yields about a half gallon of syrup, and is made much the same as maple syrup is made.

In his October Magazine, describing a visit to Mr. Leslie's hospitable home in Morden, Mr. Rahmlow says: "We were very much interested in the coffee which was served, made from apples, and called Appletine. It was introduced in British Columbia and is quite popular thruout Canada as a substitute during coffee rationing. Apples are dried, roasted, and ground. One teaspoonful of the powder will make 4 to 5 cups of coffee, and the Canadian price is only 25 cents per pound. Coffee fans may notice the difference, but we thot it was good." Personally we are using "Coffee Stretcher", which looks as tho it was made from shredded baled hay. It is mixed with very finely ground coffee on a 50-50 basis and then used in the usual ratio of a teaspoonful to a cup of water and brot to a boil, as one would brew the regular cheering morning cup of coffee. It makes a drink that looks and tastes like coffee, tho probably it does not pack the kick of the regular article. Anyway, tho my family scorns to even taste it, I have been getting by with it for the past two months and the family don't notice any toning down of my usual disagreeable temper. Come down to one cup a day, never as long as they continue to raise hay. A Yule-tide card from Dr. A. F. Yeager says, in part: "I was fortunate in getting a deer, on the last day of the season."

A statesman is one who looks to the benefit of future generations, while politicians look to the next election.—W. S. Campfield in Virginia Fruit

History records no greater flop than the attempt to interest the human race in work.—Foxtail Johnson in The Prairie Farmer.

First Pole-in-Exile—"Surely you know the King's English?"

Second Pole-in-Exile—"Of course he is. Who said he wasn't?"—The Earthworm.



QUESTIONS AND ANSWERS

for January

S. A. McCrory



S. A. McCrory

Q. The disease on the cotoneaster hedge, a sample of which is being sent to you, is causing the plants to lose their attractiveness. How may it be controlled?

A. The cotoneaster branch you sent for observation is infested with an insect known as Oyster Shell Scales. There is no disease infection. This insect is very common in this area and may be found on many plant species. Unfortunately the cotoneaster is more likely to be attacked than most other plants and once attacked the insects are likely to increase to dangerous numbers. It is difficult to control. Best results seem to be had by applying a Lime-sulfur spray as a dormant spray at a concentration of 1 gallon of liquid lime-sulfur to 9 of water. This may be applied during the first warm days of late winter. During the growing season two or three more applications of the spray should be used but the concentration should be reduced to 1 1-2 gallons to 50 gallons of water. An oil spray is also effective in controlling this insect.

K. Where may I get certified seed potatoes for planting next spring?

A. The South Dakota Potato Growers Association are producers of good seed potatoes. It would seem logical for you to suggest to some local merchant that he contact this or some similar organization and purchase a supply for his trade. This would also be a service to your neighbors. It is well to remember that not all certified potatoes are certified as to disease infection.

Q. Are Garden or lawn supplies going to be available next spring?

A. The reports indicate sufficient quantities of vegetables and flower seeds to supply demand. Fertilizers containing nitrogen are scarce and their use may be limited to the more essential plants. The greatest shortage will be with certain insecticides and fungicides. Organic insecticides, especially those containing rotenone will be hard to supply. Fungicides containing copper will likely be scarce. It would be very much in line with the war effort to check over all your garden supplies and plants to salvage anything possible.

Q. When is the best time to prune evergreens?

A. Most evergreens are pruned for form when growth is about to become active. Any unsightly or thin foliated places resulting will be exposed to view for the shortest possible time. Therefore it is

well to do most of the pruning in early spring. If the pruning you plan is on trees where the branches are hanging so low as to be in the way because of snow they may be removed during the winter season without injuring the tree.

Q. My potted plants consisting of Cyclamen, Jerusalem Cherry, and Gloxinia have all shown lack of vigor recently. Since they have not been neglected, can you explain what may be wrong with these plants?

A. Potted plants must be well watered during the winter months. The air in most heated homes carries very little moisture. It is well to turn the plants half-way around each day so that all parts of the plant receives light. It may be well to remove the dust from the foliage by the use of a sponge for the large leaves or a syringe for plants that can not be sponged.

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An air-raid precaution instructor in England, recently gave this advice: "If an incendiary bomb comes thru the roof, don't lose your head. Put it in a bucket and cover it with sand."—Argus-Leader.

Feb.
1943

BOOK REVIEWS

By
Mrs. F. Briley



Mrs. F. Briley

Common Edible Mushrooms, by Clyde M. Christensen, Ass't. Professor of Plant Pathology, University of Minnesota. Published by The University Press, University of Minnesota, Minneapolis, Minn. Price \$2.50.

Personally I call this a charming and most delightful book. The text is very simple yet informative, and if you like mushrooms, it gives you that same feeling that comes when you look at an illustrated seed catalog in January. You can hardly wait for the time when you can look for edible mushrooms, because we read in the book that they are available in abundance to everyone for the mere pleasure of picking them. They are found everywhere, in front yards on shade trees, in parks, fields, and forests. Anyone can easily learn to know the common edible mushrooms well enough to pick and eat them with perfect safety. Forty seven edible varieties are discussed in detail and illustrated with 67 photographs taken by the author, 18 species are shown in full color. Plan some mushroom hunt's next spring but before starting in your mushroom hunt you should by all means, study the pictures and descriptions of the common groups and kinds described in Common Edible Mushrooms. Anyone can easily come to know the common safe mushrooms well enough to pick and eat them with perfect safety. The famous old recipe for juggled hare reads "First catch your hare". The greater part of the book tells you how to catch your mushrooms, then the last section of the book gives some new and original recipes; one at least is more than 300 years old. Common Edible Mushrooms is a book "hot off the press," the publication date was Jan. 20th., 1943.

Out of Doors in Autumn, by C. J. Hylander, with illustrations by the author, Published by Macmillan Co., 60 Fifth Ave. New York, N. Y. \$1.50. Out of doors in Autumn, is the third in a series of books for young people to help them renew their acquaintance with some plants and animals and form new friendships with others. In Out of Doors in Autumn, the world of animal and plant life prepares for winter. There are chapters on birds of prey, the last of the flower parade, how plants and animals prepare for winter. The clear-cut line drawing add materially to the value of the book. It is very readable for intermediate grades and up. In the first chapter we read, "Autumn in

the out of doors is a season in which plants and animals seem to pause after their intense growth activities of summer. It is only a slight pause, however, for soon both animals and plants must prepare for the more adverse living conditions of winter." Out of Doors in Autumn should be in every home library.

The Bld Eagle (Continued from Page 14)

in the Ohio region. He published a number of articles and finally a book on the bird. One of his articles will be found in The National Geographic Magazine for May, 1929. The large size of the nests and their continued use is well known. Herrick's "great nest" was occupied over a period of at least 35 years. It was 70 feet up in a hickory tree and was 12 feet high and 8 1-2 feet wide in its later days.

Bent says, "The eggs are ridiculously small for so large a bird". They average less than three inches in length, are usually rough white and not marked with other color. Incubation lasts about 35 days, and the young remain in the nest about ten weeks. As before mentioned, fish comprise a large part of the eagles' food. They frequently rob other birds of fish which have been caught. A variety of small animals are included, especially when or where fish are not available. One well known bird student reported that geese and brant seemed the favorite food along the Virginia coast, but this was on statements by a hunter, and the writer himself had not seen the eagles capture birds as reported. Another person reported many rabbits and a variety of other mammals and birds, but no snakes nor lambs though in sheep country. Fawns are included in some reports.

The greatest publicity in recent years has come from the situation in Alaska where fish canning interests regarded the eagles as a menace to their industry and were able to have a bounty placed upon the birds in 1917. Conservation interests have opposed such action, and in 1940 a federal bill was enacted giving protection to the eagles, but Alaska was excepted.

Over all its range the bald eagle is not sufficiently common to be anything but a scenic asset. Of course a person who loses game or poultry is likely to feel that he is making too large a contribution to the pleasure of the general public. Along the Alaska coast the eagles are numerous, probably attracted by the large numbers of dead salmon on the shores after the spawning season. When these are not present, the eagles must seek other food, fresh fish, birds, mammals. To what extent they become destructive seems to be still a matter of opinion. More than 50,000 have been killed for the bounty.